

Preventive Mastectomy

Preventive mastectomy (also called prophylactic mastectomy) is the surgical removal of one or both breasts in an effort to prevent or reduce the risk of breast cancer. The surgeon removes the entire breast and nipple (total mastectomy). In the past, the surgeon may have removed the breast tissue but spared the nipple (subcutaneous mastectomy). This procedure is no longer recommended.

Preventive mastectomy may be considered for several reasons. Women who have already had one breast removed due to cancer may consider this procedure in an effort to avoid developing a new cancer in the other breast. Preventive mastectomy may also be an option for women with a strong family history of breast cancer, especially if several close relatives developed the disease before age 50. Women in families with hereditary breast cancer who test positive for a known cancer-causing gene alteration may also consider this surgery. In addition, preventive mastectomy is sometimes considered for women who have had lobular carcinoma in situ, a condition that increases their risk of developing breast cancer in the same and/or in the opposite breast. Infrequently, preventive mastectomy may be considered for women with breast calcifications or for women whose breast tissue is very dense. Dense breast tissue is linked to an elevated risk of breast cancer and also makes diagnosing breast abnormalities difficult. Multiple biopsies, which may be necessary for diagnosing abnormalities in dense breasts, cause scarring and further complicate examination of the breast tissue.

Because all women are different and the degree to which preventive mastectomy can protect an individual woman from breast cancer is not known, the procedure should be considered in the context of each woman's unique risk factors and her level of concern.

It is important for a woman to know that having a preventive mastectomy does not guarantee that she will never develop breast cancer. It is impossible for a surgeon to remove all breast tissue, and breast cancer can develop in the small amount of remaining tissue. A woman who is considering preventive mastectomy should talk with a doctor about her risk factors, the mastectomy procedure, potential complications, followup care, her feelings about mastectomy, and alternatives to surgery. She may wish to get a second medical opinion to help with the decision.

Women who choose to have preventive mastectomy may decide to have breast reconstruction (plastic surgery to restore the shape of the breast). Before performing this type of procedure, the plastic surgeon carefully examines the breasts and discusses the appropriate types of reconstruction.

In one type of reconstructive procedure, the surgeon inserts an implant under the skin and the chest muscles. Another procedure to create the shape of a breast uses skin, fat, and muscle from the woman's abdomen or back. After both types of reconstructive surgery, the surgeon will discuss any limitations on exercise or arm motion.

Women who have reconstructive surgery will be followed carefully in the postoperative period to detect and treat complications, such as infection, movement of the implant, or contracture (the formation of a firm, fibrous shell around the implant caused by the body's reaction to it). Routine screening for breast cancer is also part of the postoperative followup because the risk of cancer cannot be completely eliminated. When women with breast implants

have mammograms, they should tell the radiology technician about the implant. Special procedures may be necessary to improve the accuracy of the mammogram.

Doctors do not always agree on the most effective way to manage the care of women who have a strong family history of breast cancer and/or have other risk factors for the disease. Some doctors may recommend preventive mastectomy, while others may prescribe tamoxifen, a medication that has recently been shown to decrease the chances of getting breast cancer in women at high risk for the disease. Some doctors may advise very close monitoring (periodic mammograms, regular checkups, and monthly breast self-examination) to increase the chance of detecting breast cancer at an early stage. Although the effects are not proven, doctors may also encourage women at high risk to limit their consumption of alcohol, eat a low-fat diet, engage in regular exercise, and avoid hormone replacement therapy.

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For More Information About Breast Implants

The U.S. Food and Drug Administration (FDA) regulates the use of breast implants and can supply detailed information about these devices. Consumers may write to the FDA Center for Devices and Radiological Health (CDRH) at HFZ-210, 5600 Fishers Lane, Rockville, MD 20857; or call the FDA's Office of Consumer Affairs toll-free at 1-888-INFO-FDA (1-888-463-6332) to listen to recorded information or to request free printed material on breast implants. The CDRH Web site is located at <http://www.fda.gov/cdrh/> on the Internet.

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Sources of National Cancer Institute Information

Cancer Information Service

Toll-free: 1-800-4-CANCER (1-800-422-6237)

TTY (for deaf and hard of hearing callers): 1-800-332-8615

NCI Online

Internet

Use <http://www.cancer.gov> to reach NCI's Web site.

CancerMail Service

To obtain a contents list, send e-mail to cancermail@icicc.nci.nih.gov with the word "help" in the body of the message.

CancerFax® fax on demand service

Dial 301-402-5874 and listen to recorded instructions.

This fact sheet was reviewed on 3/24/99